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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,688	02/02/2004	Andreas Birkner	016790-0488	7647

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EXAMINER	
RAEVIS, ROBERT R	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/768,688	BIRKNER ET AL.
	Examiner	Art Unit
	Robert R. Raevis	2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/053,628.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2-2-04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The disclosure is objected to because of the following informalities: the first page of the application should make reference to the parent application.

Appropriate correction is required.

Claims 1,3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, what does "each other" (line 4) relate to? Does it mean that the claim is limited such that each of the three workstations is open to the changer at least one at a time, or does it mean that all of the components (three workstations and changer) are all open to each other at the same time? Part of the ambiguity here is due to the phrase "to be" (line 4) which seems to suggest that some elements are closed at some time, yet Applicant's disclosure suggests that this is not the case. Use of the phrase "to be" is not consistent with the written disclosure and drawings, as each of the components are always open to all of the remaining components. Please note that this is in contrast with claim 20, which clearly limits its arrangement such that the changer and three workstations are all open to each other (at the same time).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volle, in view of Azumano et al, and further in view of Akimoto.

Volle teaches a method for transporting and inspecting semiconductor substrates, comprising (Fig. 1): providing at least three workstations 5 and changer 3 arranged in a sealed environment in such a way that wafers 7 can be processed "simultaneously" (col. 4, lines 58-59) in the workstations 5 and can be "consecutively" (col. 4, line 62) inserted moved into relevant workstations; rotating the changer 3 in opposite directions (note the double arrow in Figure 1) to move the substrates in the device. The method includes a level of inspection. (See col. 5,lines 20-40.)

Volle's written specification does not expressly state that three workstations and changer are (all) open to each other in the same housing, and does not describe lifting/lowering the changer.

As to claims 1 and 3, it would have been obvious to employ a single housing for the stations as Azumano et al teach (Figure 5) use of a single housing assembly to provide for an intact wafer transporting/processing assembly. In addition, it would have been obvious to employ a plurality of stacked workstations in Volle because Akimoto teaches that process units may be stacked to allow for a greater number of processing chambers. The stacking of such units necessarily demands that the changer 3 of Volle move vertically, as is done in Akimoto. Finally, Volle's teaching (col. 4, lines 58-64) that wafers are simultaneously tested in various workstations, and are consecutively moved from one workstation into another without having to be exposed to the outer atmosphere of the device suggests that at least one work station and the changer are open to each

other. In the alternative, it would have been obvious to have two of the stations and changer are open to each other when moving a substrate from one workstation into another workstation so that a wafer under test may be quickly moved from one workstation to the other in the consecutive ("consecutively", line 62, col. 4 of Volle) manner called for by Volle.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Volle in view of Azumano et al.

As to claim 20, it would have been obvious to employ a single housing for the stations as Azumano et al teach (Figure 5) use of a single housing assembly to provide for an intact wafer transporting/processing assembly. In addition, it would have been obvious for the changer and three workstations to be open to each other because Volle's "simultaneously" and "consecutively" teaching suggests that after processing is completed (in the slowest workstation of) in all "simultaneously" working workstations, all the wafers may then be "consecutively" relocated to the next relevant workstation, resulting is all workstations and changer being open to each other during that relocation.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter et al in view of Volle.

Hunter teaches (Figure 5) an arrangement to transport and inspect wafers, including: work stations (note the view ports 120 on column 10, line 7) in a housing; and rotatable changer 126. The changer moves wafers from chamber to chamber.

The changer does not seem to clearly rotate in opposite directions.

As to claim 20, it would have been obvious to rotate Hunter's changer in opposite directions because Volle teaches (double arrow in Figure 1) that a changer that rotates in opposite directions permits for positioning the changer in a location of interest in the shorted possible time/displacement.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 10/379,677 in view of Volle.

As to claims 1 and 20 of the Application, it would have been obvious to for the changer and three workstations of claim 2 to be open to each other because Volle's "simultaneously" and "consecutively" teaching suggests that after processing is completed (in the slowest workstation of) in all "simultaneously" working workstations, all the wafers may then be "consecutively" relocated to the next relevant workstation, resulting is all workstations and changer being open to each other during that relocation.

This is a provisional obviousness-type double patenting rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 6:30am to 3:30am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on ***. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RRR

RAEVIS